Listing and Amendments to the Claims

- 1. (currently amended) Method for <u>encrypting data renewing a symmetric key</u> in a communication network comprising a device of a first type containing:
- a first symmetric key for encrypting the data to be sent to a device of a second type connected to the network, wherein said second type of device is a different device type from said device of a first type; and
- and an encrypted first symmetric key which is generated from the encryption of said first symmetric key encrypted with a second symmetric network key known only by at least one device of a second type connected to said network;

the method comprising the steps that consist, for the device of a first type of, in:

- (a) generating a random number;
- (b) computing a new symmetric key as a function of the first symmetric key and said random number;
 - (c) encrypting the data to be transmitted with the new symmetric key; and
 - (d) transmitting to a device of a second type, via said network:
 - the data encrypted with the new symmetric key;
 - the random number; and
 - said <u>encrypted</u> first symmetric key<u>. encrypted with the second symmetric network key.</u>
- 2. (currently amended) Method according to claim 1, wherein the function used to compute the new symmetric key is a one-way derivation function.
- 3. (currently amended) Method according to claim 2, wherein the function is a hash or encryption function.

- 4. (currently amended) Method according to <u>claim 1</u>, also comprising the steps consisting, for the device of a second type that receives data transmitted at step (d) of, in:
- (e) decrypting, with the second symmetric network key the <u>encrypted first</u> symmetric key as to produce <u>encryption of</u> the first symmetric key;
- (f) determining, based on the first symmetric key obtained at step (e) and on said random number, the new symmetric key; and
 - (g) decrypting the data received with the new symmetric key thus obtained.